OHIO COASTAL NONPOINT PROGRAM FINDINGS AND CONDITIONS

FOREWORD

This document contains the findings for the coastal nonpoint pollution control program submitted by the State of Ohio pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The findings are based on a review of the Ohio Coastal Nonpoint Pollution Control Program submittal (September 2000). The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) reviewed this information and evaluated the extent to which it conforms with the requirements of CZARA.

NOAA and EPA commend Ohio on the substantial amount of time and effort put into developing the program and we appreciate the commitment the State of Ohio has shown to complete an ambitious task with limited resources. We will continue to work with Ohio to ensure that these findings represent an accurate assessment of current State capabilities and efforts to address coastal nonpoint source pollution.

APPROVAL DECISION

NOAA and EPA approve the coastal nonpoint pollution control program submitted by the State of Ohio pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990, subject to certain conditions.

This document provides the specific findings used by NOAA and EPA as the basis for the decision to approve Ohio's program. It also provides the rationale for the findings and includes conditions that will need to be met for Ohio to receive final approval of its program. The timeframes associated with conditions become effective on the date of the approval letter for these findings.

<u>INTRODUCTION</u>

This document is organized by the major nonpoint source categories and subcategories identified in the section 6217(g) guidance and the administrative elements identified in the program guidance (including the boundary for the 6217 management area). Where appropriate, NOAA and EPA have grouped categories and subcategories of management measures into a single finding. The structure of each finding follows a standard format. Generally, the finding is that the State program includes or does not include management measures in conformity with the (g) guidance and includes or does not include enforceable policies and mechanisms to ensure implementation. In some cases, the finding reflects that the State has identified a back-up enforceable policy, but has not yet demonstrated the ability of the authority to ensure implementation. For further understanding of terms in this document, the reader is referred to the following:

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA, January 1993)

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance (NOAA and EPA, January 1993)

Flexibility for State Coastal Nonpoint Programs (NOAA and EPA, March 1995)
Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) (NOAA and EPA, October, 1998) (Final Administrative Changes)

The references in this document to page numbers and text refer to the <u>Ohio Coastal Nonpoint Pollution Control Program</u> submittal (September 2000) ("program submittal"). We have relied upon, but do not repeat here, the extensive information that the State included in the program submittal. Further information and analysis is contained in the administrative record for this approval decision and may be reviewed by interested parties at the following locations:

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I. <u>BOUNDARY</u>

FINDING: Ohio's proposed boundary for the 6217 management area is sufficient to control the land and water uses that have or are reasonably expected to have a significant impact on Ohio's coastal waters.

RATIONALE: Ohio has determined that NOAA's recommended management area for the 6217 program is appropriate to control the land and water uses that have a significant impact on the State's coastal waters and therefore has adopted NOAA's recommendation as the State's 6217 management area. This area generally includes the entire Lake Erie watershed, which includes portions of 35 counties and covers an area of 11,649 square miles. The major stream basins within the Lake Erie watershed include the Maumee, Portage, Sandusky, Huron, Vermillion, Black, Rocky, Chagrin, Cuyahoga, Grand and Ashtabula.

II. AGRICULTURE

FINDING: Ohio's program includes management measures in conformity with the 6217(g) guidance for erosion and sediment control, pesticides, grazing, nutrient management, and wastewater and runoff from confined animal feeding operations. Ohio's program does not include management measures in conformity with the 6217 (g) guidance for irrigation waste water. The Ohio program has enforceable policies and mechanisms in place for erosion and sediment control, confined animal feeding operations, and grazing. The State has identified backup enforceable

authorities for the agriculture management measures, but has not yet demonstrated the ability of these authorities to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Ohio will include in its program management measures in conformity with the agricultural management measures for irrigation water management. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement the irrigation, nutrient, and pesticide management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.)

RATIONALE: Ohio's Coastal Nonpoint Pollution Control Program includes management measures in conformity with the 6217 (g) guidance for erosion and sediment control, pesticides, nutrients, grazing and wastewater and runoff from confined animal feeding operations. These management measures are addressed primarily through Ohio's Agricultural Pollution Abatement Program and Pesticide Program, among other programs. Best Management Practices (BMPs) the State will use to implement the agricultural management measures are described in the *Ohio Livestock Manure and Wastewater Management Guide* and the *USDA Field Office Technical Guide*.

Ohio does not hold the authority necessary to ensure the implementation of all the agriculture management measures throughout the 6217 management area. The Agriculture Pollution Abatement Program does include enforcement provisions that allow the chief of the Division of Soil and Water Conservation to issue an order when notice of a violation is received (OAC 1501:15-5-16). Violations are typically submitted to the chief when voluntary efforts to get the operator to address the problem fail. Operators that fail to follow a chief's order are considered guilty of a misdemeanor of the first degree. However, the program submittal states that "(e)nforcement authority is provided on a complaint-driven basis for livestock waste and erosion control; however, enforcement authority and mandatory implementation requirements are not currently provided for agricultural management measures (pp. 3-17)."

Ohio relies heavily on voluntary and incentive-based programs to encourage management measure implementation, such as the Western Lake Erie Watershed Conservation Reserve Enhancement Program, the Groundwater Protection and Management Strategy and the Source Water Protection Programs, as well as numerous technical and financial assistance programs. However, it is not clear how these programs will be used to promote implementation of these management measures. The State also describes backup authorities to address nonpoint source

pollution through the implementation of water quality standards through the State's Water Quality Pollution Control Laws and Water Quality Rules (ORC 6111 and OAC 3745-1), authority under the Stream Litter Law (ORC 1531), and specific authorities given to municipalities for the protection of drinking water sources (ORC 743.25). In particular, the program submittal notes that nearly all enforcement action for agricultural nonpoint source pollution originates from Ohio Department of Natural Resources' (ODNR) Division of Wildlife, via the Stream Litter Law. In addition, Ohio's Groundwater Protection and Management Strategy and Source Water Protection Programs establish initiatives to protect surface and groundwaters from pollution. However, it is not clear that these authorities can be used to implement the agriculture management measures throughout the 6217 management area. Additional information is needed in order to make this determination. See Section XIV for additional information on these requirements.

The Ohio program requires erosion and sediment control measures under the Ohio Agricultural Pollution Abatement Program. The program is administered by the ODNR in cooperation with the Soil and Water Conservation Districts (SWCDs). The program includes the erosion control specifications set forth in the *USDA Field Office Technical Guide*. In addition, rules for the Ohio Agricultural Abatement Program mandate that soil erosion from wind erosion be equal or less than permissible soil loss values (i.e., soil loss tolerance "T" factors) related to the specific soil series as specified in the *USDA Field Office Technical Guide* (OAC 15:15-5-08). Ohio is one of the few States to include such a specification in its regulations.

Ohio also has authority over livestock operations through the Ohio Agricultural Pollution Abatement Program administered by the ODNR and SWCDs. This program applies to all animal feedlots and animal waste management facilities and land application areas for managing and disposal of animal wastes (OAC 1501:15-5-01) and requires operators to construct, operate and maintain settling, grass filtration, or soil infiltration systems in accordance with the *Ohio Livestock Manure and Management Guide* and or the *USDA Field Office Technical Guide*. Both of these guides address the structure requirements for confined animal facilities described in the 6217(g) guidance. The *Ohio Livestock Manure and Wastewater Management Guide* also describes design options for waste utilization systems. The program submittal notes that a National Pollution Discharge Elimination System (NPDES) permit is required for animal operations above 300 animal units that convey a controlled, direct discharge to waters of the State. Concentrated animal feeding operations (CAFOs) that are covered by the NPDES permit are considered exempt from the requirements of these management measures.

Nutrient management plans are required of animal feeding operations with more than 1000 animal units under Ohio's Water Pollution Control Laws (ORC 6111). Smaller animal feeding operations (AFOs) and other types of farms are not required to have nutrient management plans. The Agricultural Pollution Abatement Program also includes provisions regarding the management of nutrients from animal waste and provides cost share funds to assist landowners in implementing BMPs. The Ground Water and Source Water Protection Programs provide authority to municipalities to protect their sources of drinking water by requiring controls of pollution sources. Ohio also has a voluntary Precision Agriculture and Manure Nutrient Management Plan Program that provides technical assistance and education to producers about proper nutrient management. A description of how this program operates and how many producers have been reached through it would be useful. It is unclear whether or not there is a program or policy in place that would ensure the implementation of the nutrient management measure outside of the municipalities' Source Water Protection area.

The State is able to address erosion control problems (i.e., physical disturbance and sediment deposition) from grazing through the authority of the Ohio Agricultural Pollution Abatement Program. Ohio will also rely on backup authorities through the Water Quality Pollution Control Laws, Water Quality Rules (ORC 6111 and OAC 3745-1), and authority under the Stream Litter Law (ORC 1531) to implement these measures.

Ohio's program submittal includes a description of the pesticide management measure, as well as an added requirement for the proper storage, handling, and disposal of pesticide materials. The Ohio Department of Agriculture (ODA) sets regulatory standards for the use, storage, and handling of pesticides, however it is not clear if these standards address all components of the management measure. ODA also has a pesticide applicator licensing/certification program. However, additional information is needed from the State to determine if these authorities can ensure implementation of this management measure throughout the 6217 management area. In particular, the State should provide information on whether the examination for certification of applicators include all of the aspects of the management measure. Ohio also has voluntary Integrated Pest and Crop Management Programs that provide education and technical assistance to landowners to implement BMPs for proper pesticide use.

The program submittal notes that there is limited irrigation in the management area at this time but the possibility for increased irrigation in the future exists. The only program cited in the program specifically related to irrigation is a demonstration project implementing Wetland Reservoir Sub-Irrigation Systems in the Maumee River Watershed.

III. <u>FORESTRY</u>

FINDING: Ohio has presented sufficient justification for exclusion of the forestry management measures.

RATIONALE: Ohio's program submittal indicates that nonpoint sources of pollution from forestry do not and are not reasonably expected to present significant adverse effects to living coastal resources or human health in Ohio. Therefore, the State proposed an exclusion of the forestry management measures.

Ohio Environmental Protection Agency's (Ohio EPA's) 303(d) report shows that all of the impaired water body segments in the Lake Erie watershed are located upstream of small lakes, it is apparent that the trapping efficiencies of these lakes would negate most of the effects of forestry-induced impairment on coastal waters. Ohio's data also suggests that sediment loads from forested areas are not excessive, and that sediment loads that are present are highly correlated with stream channel and bed movements rather than upland land use practices. Furthermore, it appears that a relatively small number of pollution complaints to ODNR were related to forestry activities. Finally, land use data for the watershed further reinforce the trend toward decreasing levels of large-scale silvicultural activity within the 6217 management area in the future. The level of milling activity in the Lake Erie watershed is also relatively low. Therefore, the State has provided sufficient evidence that forestry related activities do not present a significant threat to coastal resources. NOAA and EPA commend the State for having a regulation in place as part of the Agricultural Pollution Abatement Program (OAC 1501:15-5-12) which requires loggers to have an operation and maintenance plan in accordance with "BMPs for Erosion Control on Logging Jobs." However, NOAA and EPA encourage Ohio to implement appropriate practices for forestry harvesting activities that do occur within the Lake Erie watershed.

IV. URBAN

A. NEW DEVELOPMENT

FINDING: The State does not include management measures for new development that are consistent with the 6217(g) guidance.

CONDITION: Within two years, Ohio will include in its program management measures for new development in conformity with the 6217(g) guidance. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement these management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.) **RATIONALE:** The State has drafted standards and specifications for stormwater practices implemented during land development (Rainwater and Land Development, 1996). These standards and specifications could be used to meet the new development, site development and chemical control management measures, but the State did not provide information regarding how the State will ensure implementation of the standards and specifications either through a primary mechanism or a back-up authority. It is also unclear how the adoption and implementation of the standards and specifications will result in the implementation by design or performance of the new development management measures to reduce total suspended solid (TSS) loadings and maintain peak development runoff rates and average volumes. EPA and NOAA, upon review of the Rainwater and Land Development Manual only identified design based standards and specifications for two practices, infiltration trenches ("the infiltration facility shall be designed with a maximum drain time of 48 hours for the 0.5 in. of runoff/acre detained for water quality treatment") and extended detention ("wet pools, when used alone to treat urban runoff quality, should retain between 0.5-1.0 in. of runoff/acre per impervious acre treated"). It is unclear whether these are recommendations or absolute design requirements and it is also unclear whether either of these requirements provide an equivalent level of treatment consistent with the management measure requirements to reduce average annual TSS loadings by 80% for all storms up to and including the 2 year/24 hour storm or maintain the predevelopment hydrology.

EPA and NOAA assume that the State anticipates that local governments will use one or more practices in the manual to achieve the new development and site development management measures. In addition, no information was provided for implementation of these measures on State lands. To facilitate implementation of the standards and specifications, the State has provided enabling legislation for local governments to enact requirements to implement the guidelines and model regulations to use as templates in the development of local requirements. However, the adoption of these regulations in whole or in part appears to be voluntary. As

back-up authorities, Ohio lists Clean Water Act (CWA) Sections 404/401 water quality certification, ORC 6111, ORC 1531, and the State's Stream Litter Law. It is not clear how these back-up authorities can be used to implement the urban management measures. The State has also not provided information describing how these authorities have been used for this purpose and information regarding implementation at the local level.

B. WATERS HED PROTECTION AND EXISTING DEVELOPMENT

FINDING: Ohio's program does not include management measures for watershed protection and existing development in conformity with the 6217(g) guidance.

CONDITION: Within two years, Ohio will include in its program watershed protection and existing development management measures in conformity with the 6217(g) guidance. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement the management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.).

RATIONALE: The State has not identified a program that contains management measures for: (1) avoiding conversion of areas that are particularly susceptible to erosion and sediment loss and (2) preservation of areas that provide important water quality benefits and/or are necessary to maintain riparian and aquatic biota. The State has also not identified aspects of a "watershed protection program" that will result in the siting of development including roads, highways and bridges to protect, to the extent practicable, the natural integrity of waterbodies and natural drainage systems. (Note: EPA and NOAA recognize that the document titled "Rainwater and Land Development, Ohio's Standards for Stormwater Management Land Development and Urban Stream Protection" contains guidance regarding the protection of riparian areas, and natural drainage systems. However, as stated in the findings on the new development management measure, it is unclear what mechanisms will result in implementation of the practices included in the manual.) The State has identified backup enforceable authorities that could be used to implement this measure, but has not yet demonstrated the ability of these authorities to ensure implementation throughout the 6217 management area.

A number of voluntary programs and funding mechanisms are described in the program submittal, such as the Lake Erie Protection Fund, which provides grants for water quality protection projects, and efforts to protect and establish stream buffers through Ohio Department

of Natural Resources Natureworks Streambanking program. The Urban Streams Program provides funding for Urban Stream Specialists to provide technical assistance in the implementation of watershed management plans in targeted watersheds. This program is active in seven counties within the 6217 management area, including Cuyohoga, Medina, Summit, Lake, Lorain, Erie, and Huron. The program submittal also describes the Remedial Action Planning (RAP) process for 4 Areas of Concern (AOC) designated within the Lake Erie Basin to address water quality impairments. These include the Black River watershed, the lower Ashtabula, Cuyahoga, and Maumee Rivers. Ohio's Regional Watershed Planning approach also appears to be very promising in implementing this management measure. Ohio EPA is directing that all watershed-based projects use its *Guide to Developing Watershed Action Plans in Ohio* to develop watershed planning projects. The guide encourages these projects to consider erosion and sediment loss and the preservation of areas that provide important water quality benefits.

The program submittal, however, does not adequately describe how it will meet the third element of the watershed protection management measure, which calls for a watershed protection program to address site development to protect the natural integrity of waterbodies and natural drainage systems. It is possible that the programs described in the previous paragraph may address this element of the measure, but the State needs to provide information on how these programs consider water quality in siting development. In particular, the *Guide to Developing Watershed Action Plans in Ohio* could be helpful here and in meeting other urban management measures.

The program submittal does not adequately describe what enforceable policies and mechanisms will be used to ensure implementation of these measures and practices. Additional information is needed on Ohio's wetlands, floodplains or other sensitive area requirements that can be used as enforceable policies and mechanisms used to implement this management measure. Actions Ohio can undertake to address this issue include ensuring that the updated Clean Water Act (CWA) Section 208 water quality management program contains policies and procedures that will directly address through enforceable policies and mechanisms the protection and preservation of sensitive areas as listed in the management measures. Ohio's program submittal included Memoranda of Understanding (MOU) between ODNR and Ohio EPA and ODNR and Ohio Department of Transportation (ODOT) regarding consistency of projects with the policies of the Ohio Coastal Management Program (OCMP), but these agreements only apply to the coastal zone, rather than the entire 6217 management area. Other actions to consider include developing a memorandum of agreement or policy that assures that the Ohio Department of

Transportation will contact and consult with Ohio EPA and/or ODNR when natural drainage is affected by road, highway, and bridge construction projects.

ORC 6111 is noted as a potential backup authority for implementing this management measure. See Section XII for information on addressing this management measure through a backup authority.

For existing development, a number of State level programs partially address this management measure, primarily through voluntary and incentive-based programs. The RAP process provides partial coverage for four Lake Erie AOC. The Ohio Coastal Management Enhancement Program appears to partially meet the management measure by identifying priority projects to reduce nonpoint source pollution using a systematic approach. The Urban Streams Program may also engage in similar work and strategies. The Natureworks program provides funding for buffer establishment for restoration and protection. However, the State has not provided information on priority watershed pollutant reduction opportunities or a schedule(s) to address these priorities.

Ohio's Water Quality Standards through ORC 6111 may serve as a backup authority for this management measure.

C. SITE DEVELOPMENT

FINDING: The Ohio program does not include management measures for site development in conformity with the 6217(g) guidance.

CONDITION: Within two years, Ohio will include in its program management measures for site development in conformity with the 6217(g) guidance. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement these management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV).

RATIONALE: The State has drafted standards and specifications for stormwater practices implemented during land development (*Rainwater and Land Development*, 1996). These standards and specifications could be used to meet the site development management measure, but the State has not provided information about how the State will ensure implementation of the

standards and specifications either through a primary mechanism or a back-up authority (see rationale described above under new development).

D. <u>CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL</u>, AND CONSTRUCTION SITE CHEMICAL CONTROL

FINDING: Ohio's program will include management measures in conformity with the 6217(g) guidance for construction site erosion and sediment control and construction site chemical control when the NPDES Phase I and Phase II requirements are implemented. When these activities are covered under the NPDES program, the State's program will include enforceable policies and mechanisms to ensure implementation of the construction site erosion and sediment control and chemical control management measures.

RATIONALE: The State's implementation of the NPDES Storm Water Phase I and II programs will be sufficient to meet the construction site erosion and sediment control management measure. However, NOAA/EPA encourage Ohio to promote the use of this management measure on sites less than 1 acre of the disturbed area, especially where these areas are in close proximity to coastal waters.

E. NEW AND OPERATING ONSITE DISPOSAL SYSTEMS

FINDING: The Ohio program includes elements (1), (2), (4) and (5) of the new onsite disposal systems (OSDS) management measure in conformity with the 6217 (g) guidance and enforceable policies and mechanisms for new residential OSDS. However, the Ohio program does not adequately address element (3) of this measure, nor does it have a management measure in conformity with the 6217 (g) guidance or enforceable policies and mechanisms applicable to non-residential OSDS. The Ohio program identifies an authority that may address non-residential OSDS (the Semipublic Sewage System Program), but information on how this program will ensure implementation of the management measures throughout the 6217 management area is needed.

CONDITION: Within two years, Ohio will include in its program management measures for establishing protective setbacks for surface waters, wetlands and floodplains for new OSDS; new nonresidential OSDS; and operating OSDS in conformity with the 6217(g) guidance. Also within two years, Ohio will include enforceable policies and mechanisms to ensure implementation of

the management measures for nonresidential new OSDS and existing OSDS throughout the 6217 management area.

RATIONALE: The Household Sewage Disposal Rules (OAC 3701-29-01 through 3701-29-21) provide adequate enforceable policies and mechanisms to control nonpoint pollution from new residential OSDS for elements (1), (2), (4) and (5) of this management measure. For example, a 48 inch separation distance between OSDS components and the normal groundwater table. In addition, these rules require that OSDS shall not be installed where the texture, structure, or permeability of soil is not suitable to provide internal drainage (OAC 3701-29-10(B)). This is a reasonable approach for undertaking a case-by-case site analysis to assure that appropriate siting factors are considered to provide for adequate drainage and therefore prevent overland flow.

As Lake Erie is more P-limited than N-limited, phosphorus is more of a water quality concern in Ohio. Therefore the elements of the new and operating OSDS management measures addressing nitrogen-limited surface waters may not be as applicable in Ohio. To address the problem of phosphorus, Ohio has developed a Phosphorus Reduction Strategy, which is a positive element of a comprehensive watershed approach. This strategy reduces phosphorus loadings to OSDS in all counties in the Lake Erie watershed by prohibiting sales and distribution of household laundry detergent containing greater than .5 percent by weight phosphorus.

It is not clear if the Household Sewage Disposal Rules adequately address element (3) to establish protective setbacks from surface waters, wetlands and floodplains of the new OSDS management measure. These rules state that a ten foot separation distance is required from any water service line and a fifty foot separation distance from any water supply source on the same or adjacent lot. However, it is not clear if the definition of water supply source includes surface waters, wetlands and floodplains and what lateral setbacks are required if these resources are not water supply sources. NOAA and EPA recommend that Ohio establish a process for case-by-case determinations on protective setbacks, similar to the State's approach under OAC 3701-29-10(B).

For existing OSDS, it is not clear if Ohio has a management measure consistent with the 6217(g) guidance and enforceable policies to implement this management measure. OAC 3701-29-17 states that the health commissioner for cities or general health districts may inspect residential OSDS at any reasonable time during the course of construction or anytime thereafter. The health commissioner may use inspection reports or other data to determine compliance. However, the program submittal does not describe how this provision of the rules is

implemented in practice. Ohio should provide information on when inspections of existing OSDS occur, such as at time of property transfer. Also, it is not clear if the State can undertake inspections or enforcement actions if the local government fails to undertake the inspections.

The program submittal states that Ohio's Semipublic Sewage System Program has the authority to regulate new and existing semipublic OSDS, including conducting maintenance and inspection surveys and taking limited enforcement actions for non-compliance. Ohio should submit information on this program for NOAA and EPA review.

F. POLLUTION PREVENTION

FINDING: Ohio's program includes management measures for pollution prevention in conformity with the 6217 (g) guidance.

RATIONALE: Ohio has many very good programs to provide technical assistance for pollution prevention, including publications and education. Ohio EPA has established an Office of Pollution Prevention, which focuses on developing initiatives that focus on industrial and commercial entities incorporating pollution prevention into Ohio EPA's regulatory activities. The Solid Waste Management Districts provide valuable and useful programs at the local level to promote proper separation and disposal of household hazardous wastes, yard wastes and pet wastes. Ohio's watershed programs also focus on pollution prevention through technical and financial assistance. NOAA and EPA encourage Ohio to pursue the strategies identified under the Ohio Comparative Risk Project, which addressed the effects of population change and urban sprawl on Ohio's environment.

G. ROADS, HIGHWAYS AND BRIDGES

FINDING: For State and Federal roads, Ohio's program includes management measures for roads, highways and bridges in conformity with the 6217(g) guidance and enforceable policies and mechanisms, except the program does not include management measures in conformity with the construction site chemical control, the operation and maintenance, and the runoff systems measures and enforceable policies and mechanisms to implement these measures throughout the 6217 management area. For local roads, highways, and bridges, Ohio's program does not include management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Ohio will: (1) develop management measures in conformity with the 6217 (g) guidance for operation and maintenance, and runoff systems and (2) develop management measures in conformity with the 6217 (g) guidance and enforceable policies and mechanisms for local roads, highways, and bridges throughout the 6217 management area. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement the construction site chemical control, operation and maintenance, and runoff systems management measures, as described in the *Final Administrative Changes* (see Section XIV.)

RATIONALE: The Ohio Department of Transportation (ODOT) maintains standards for the construction and maintenance of State-owned and Federally funded highway and bridge projects. Activities relating to the construction of roads, highways, and bridges are permitted under the NPDES Storm water program. ODOT's Handbook for Erosion and Sediment Control set forth erosion and sediment control goals and BMPs for new transportation and construction projects. ODNR approval is required for ODOT projects, including bridges within 1000 feet of scenic rivers (but only outside of municipalities). However, Ohio needs to clarify whether similar standards exist and whether ODNR approval is established in local governments for local/municipal roads, highways and bridges.

The NPDES permit does not require additional operation and maintenance procedures for roads, highways, and bridges. However, it does require that control practices shall be maintained as needed. Ohio indicates that the standard operation and maintenance procedures followed by ODOT and its contractors incorporate BMPs to reduce the potential for the release of pollutants into the environment. The State should provide information regarding the procedures followed by ODOT and its contractors.

The program described for runoff systems appears to be implemented only in response to identified problems. The intent of this measure, however, is to identify, prioritize, and schedule improvements (not necessarily repairs) to existing runoff controls. The State should provide a priority list and schedule for retrofit projects to reduce road, highway, and bridge pollutant loadings, if available.

Information is also needed on how CWA water quality standards, the Pesticide Licensing and Registration Program and the Stream Litter Law can be used to implement the operation and maintenance and runoff systems measures. The State also needs to describe how operation and maintenance and runoff systems are addressed for local roads and bridges.

V. MARINAS AND RECREATIONAL BOATING

A. <u>SITING AND DESIGN</u>

FINDING: The Ohio program includes management measures for marina siting and design in conformity with the 6217(g) guidance for water quality assessment, habitat assessment, marina flushing, and sewage facilities. The Ohio program does not include management measures in conformity with the 6217(g) guidance for shoreline stabilization, stormwater runoff, and fueling station design. The program includes enforceable policies and mechanisms to ensure implementation of the water quality assessment, habitat assessment, marina flushing and sewage facilities management measures. The program does not include enforceable policies and mechanisms for shoreline stabilization, stormwater runoff, and fueling station design. The State has identified backup enforceable policies and mechanisms, but has not demonstrated its ability to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Ohio will include in its program management measures for shoreline stabilization, stormwater runoff, and fueling station design in conformity with the 6217(g) guidance. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement these management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.)

RATIONALE: The program document states that the management measures apply to marinas with ten or more slips; boat maintenance and repair yards that are adjacent to water; Federal, State or local facilities that involve recreational boat maintenance or repair that is on or adjacent to water; public or commercial boat ramps; and any mooring field with ten or more boats moored. Ohio's Submerged Lands Lease Program authorizes ODNR's Director to require an environmental impact assessment for marina projects and deny an application for a submerged land lease if the proposed project will have negative impacts upon water quality, including considerations addressed under the water quality and habitat assessment management measures. The program submittal notes that "consideration of marina flushing in the siting and design of new marinas is included as part of the agency review process invoked under ODNR's Submerged Land Lease Program; and the Ohio EPA's Section 401 Water Quality Certification and Clean Water Act programs." Under Ohio's Marina Licensing Program, new marinas must develop a plan to provide adequate sewage facilities for watercraft. Additionally, under the Clean Vessel

Act, Ohio is promoting the installation and usage of adequate sewage facilities at all of Ohio's existing Lake Erie marinas.

Ohio has not yet adopted management measures in conformity with the 6217(g) guidance nor does it have enforceable policies and mechanisms in place for shoreline stabilization, stormwater runoff, and fueling station design. While Ohio cites its Submerged Lands Lease Program as the primary authority for these management measures, Ohio has not demonstrated how these management measures are specifically considered in the ODNR Director's review of marina projects. The State's *Rainwater and Land Development* guidance is cited for including recommended strategies for stormwater runoff control. However, this guidance was not submitted with the program document. Ohio is encouraged to submit this guidance for NOAA and EPA review. Additionally, while stormwater NPDES permits associated with construction are enforced in the State, this permit does not affect activities associated with the control of total suspended solids from hull maintenance areas as specified under the stormwater runoff management measure. Ohio should provide additional information regarding the incorporation of these management measures in marina siting and design.

Ohio is encouraged to pursue the recommended actions described in the program document for marine sewage, habitat alteration, and program coordination.

B. OPERATION AND MAINTENANCE

FINDING: The Ohio program includes management measures for Onsite Sewage Disposal System (OSDS) operation and maintenance in conformity with the 6217(g) guidance for solid waste, liquid material, boat cleaning, public education, maintenance of sewage facilities, and boat operation. The Ohio program does not include management measures in conformity with the 6217(g) guidance for fish waste and petroleum control. The program includes enforceable policies and mechanisms to ensure implementation of the solid waste, liquid material, boat cleaning, maintenance of sewage facilities, and boat operation management measures. The program does not include enforceable policies and mechanisms for the fish waste and petroleum control management measures. The State has identified backup enforceable policies and mechanisms, but has not demonstrated its ability to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Ohio will include in its program management measures for fish waste and petroleum control in conformity with the 6217(g) guidance. Within one year,

Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement these management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.)

RATIONALE: The program document states that the management measures apply to marinas with 10 or more slips; boat maintenance and repair yards that are adjacent to water; Federal, State or local facilities that involve recreational boat maintenance or repair that is on or adjacent to water; public or commercial boat ramps; and any mooring field with ten or more boats moored. Ohio's Marina Licensing Program requires marina owners and operators to provide for the proper storage and disposal of all wastes generated at the marina, including motor oil, antifreeze, and lead batteries and wastes associated with boat cleaning operations. In addition, leasing conditions established under ODNR's Submerged Lands Lease Program can be imposed to require the proper storage and disposal of solid wastes. ODNR requires marinas with dockage for watercraft having permanently installed sewage holding tanks to provide a sewage pumpout facility. Ohio also promotes clean boating through a number of public education programs, including the Boating Education Program and the Boating and the Environment Program, which addresses boat cleaning and operation, as well as petroleum control and other operation and maintenance measures.

Ohio does not clearly identify how it will address fish waste in its existing program. Petroleum control to protect against fuel and oil spills, and discharges of bilge oils as specified in the 6217(g) guidance, also needs to be addressed. Additional information is needed on how the Marina Licensing Program and the Submerged Lands Lease Program and other authorities can be used to implement these measures.

The program document identifies the Stream Litter Law as an authority that can be used to address these management measures, in addition to the Marina Licensing Program and Submerged Lands Lease Program. These may be used as backup authorities to implement the fish waste and petroleum control management measures.

VI. <u>HYDROMODIFICATION</u>

FINDING: The Ohio program includes management measures for hydromodification in conformity with the 6217(g) guidance for: (1) evaluating the potential effects of proposed channelization and channel modification on physical and chemical characteristics of surface

waters in coastal areas (2) plan and design channelization and channel modification to reduce undesirable impacts and (3) erosion and sediment control for dams. The Ohio program does not include management measures in conformity with the 6217(g) guidance for developing an operation and maintenance program for existing modified channels, streambank and shoreline erosion, chemical and pollution control for dams, and protection of surface water quality and instream and riparian habitat for dams. The State has identified backup enforceable policies and mechanisms, but has not demonstrated its ability to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Ohio will include in its program management measures for developing an operation and maintenance program for existing modified channels, streambank and shoreline erosion, chemical and pollution control for dams, and protection of surface water quality and instream and riparian habitat for dams in conformity with the 6217(g) guidance. Within one year, Ohio will submit a legal opinion and supporting documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement the hydromodification management measures throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.).

RATIONALE: Ohio presents a number of Federal and State programs that address hydromodification management measures in the event that new projects or permits are sought. However, Ohio does not clearly demonstrate how it intends to meet the management measures in the absence of proposed new work. Ohio relies primarily on Clean Water Act Section 404 Permits and the Section 401 Water Quality Certification Program as authorities to implement these measures. See Section XIV for information required from the State regarding the use of Section 401 certifications to meet program requirements. The program document describes several other programs and authorities that also support implementation of these management measures.

The first two elements of the channelization and channel modification management measures are to evaluate the potential effects of proposed channelization and channel modification; and plan and design new channelization and channel modification projects to reduce undesirable impacts. For these elements of the management measures, the State Scenic Rivers program can be used in addition to the CWA Section 404/401 program to discourage hydromodification projects on selected segments, and the Division of Wildlife regulations give the State enforcement authority when severe degradation of habitat or water quality occurs, although it is seldom used. Together with other programs cited in the submittal, Ohio has support to deal

with hydromodification impacts from new projects. However, Ohio has not clearly addressed the operation and maintenance program development component of the channelization and channel modification management measures, although the State's existing capabilities and techniques for investigating biological indices would seem applicable here.

NOAA and EPA are concerned with Ohio's conclusion that "it is difficult to prove degradation using existing standards or damage recovery policies" since "there are no water quality standards that exist for physical characteristics" (p. 7-7). NOAA and EPA are aware that Ohio has in fact demonstrated in other venues the ability to document through biological indices conditions and causes of impairment in the State's waters. (For example, see EPA's Summary of State Biological Assessment Programs for Streams and Rivers, EPA 230-R-96-007, February 1996). NOAA and EPA recommend that Ohio re-visit its existing capabilities and techniques and integrate these findings into its program.

To implement the dams management measures, Ohio cites a number of existing Federal, State, and local programs. In addition to CWA Section 401/404 permit conditions, the State's Scenic Rivers Program and the Dam Safety Program provide additional protections to water quality for dam construction projects. See Section XIV for additional information on using Section 401 certifications as backup authorities. As for construction site erosion and sediment control, the State's implementation of the NPDES Storm Water Phase I and II programs will be sufficient to meet the erosion and sediment control management measure.

For the chemical and pollutant control management measure for dams, Ohio has not clearly described how this measure is addressed through the Dam Safety Program, the Pesticide Licensing and Registration Program, and other programs and authorities discussed in the program submittal. The State should provide additional documentation on how this measure is addressed through these and other programs, such as permit application review criteria under the Dam Safety Program.

For protection of surface water quality and instream riparian habitat, Ohio has not clearly demonstrated how it intends to implement this management measure in the absence of a permit to build a new dam. NOAA and EPA encourage Ohio to explore its biological monitoring program, which could provide the linkage necessary to take action when dams are shown to cause or threaten to cause water quality problems.

Ohio cites a number of financial and technical assistance programs that provide incentives for stabilizing stream banks and riparian protection. Additionally, through the Conservation Reserve Enhancement Program (CREP), Ohio has committed to fund \$2 million per year, affecting two thirds of Ohio's Lake Erie basin. Ohio should clarify how it will protect streambanks and shorelines from erosion due to uses of either the shorelands or adjacent surface waters. NOAA and EPA also recommend that Ohio clarify how the State coordinates with other programs to identify where shorelines and streambanks are a nonpoint source problem.

NOAA and EPA encourage Ohio to pursue the recommendations made by the coastal and statewide nonpoint source workgroups regarding regulatory, voluntary and education efforts to protect and restore stream functions.

VII. WETLANDS, RIPARIAN AREAS, AND VEGETATED TREATMENT SYSTEMS

A. WETLANDS AND RIPARIAN AREAS

FINDING: The Ohio program includes management measures in conformity with the 6217(g) guidance for the protection and restoration of wetlands and riparian areas. The State has identified backup enforceable policies and mechanisms, but has not demonstrated their ability to ensure implementation throughout the 6217 management area.

CONDITION: Within one year, Ohio will submit documentation to demonstrate that back-up authorities can be used as enforceable policies and mechanisms to implement the management measure for the protection of wetlands and riparian areas throughout the 6217 management area, as described in the *Final Administrative Changes* (see Section XIV.)

RATIONALE: Ohio cites the CWA Section 404 permitting and Section 401 certification programs as the primary regulatory authority for this measure. Ohio has developed water quality standards (OAC 3745-1-51 through 53) for wetlands that include provisions to protect biological and physical characteristics and water quality necessary to support existing habitats and populations of wetlands flora and fauna. In addition, Ohio has a wetlands antidegredation policy in place (OAC3745-1-54). ODNR has also issued a policy statement stating that it will "disallow harmful alterations in the natural flow of water that nourishes wetlands and to protect wetlands from alteration by dredging, filling or draining, solid waste disposal, direct and indirect effects of construction activities, siltation, or the addition of pesticides and other pollutants from point and nonpoint sources of pollution (see Appendix K-19)." The program submittal also

states that the State's Water Quality Certification Program has imposed general and specific conditions on many Section 404 nationwide general permits. See Section XIV for additional information on using Section 401 certifications as backup authorities.

Ohio has several voluntary programs in place to address the protection of wetlands and riparian areas. These include the Natureworks Program, which provides funding for riparian protection and restoration projects, and the State Nature Preserve Program. However, Ohio should clarify how it intends to implement its programs for wetlands and riparian areas that are serving nonpoint source abatement functions. Ohio should clearly demonstrate how wetlands and riparian protection programs coordinate with State agencies producing data showing where wetlands are particularly significant in the landscape for nonpoint source control, and are protected accordingly.

In addition to having a number of Federal and State programs that target wetlands and riparian area restoration in the Lake Erie basin, Ohio has developed a comprehensive statewide wetlands inventory system (already complete for the §6217 management area), and is initiating a statewide Wetland Restoration and Mitigation Strategy that will provide a blueprint for Ohio wetland restoration and mitigation efforts. NOAA and EPA encourage Ohio to identify how this strategy will be incorporated into the State's coastal nonpoint program.

B. VEGETATED TREATMENT SYSTEMS

FINDING: The Ohio program includes a management measure and enforceable policies and mechanisms in conformity with the 6217(g) guidance for vegetated treatment systems.

RATIONALE: Ohio clearly demonstrates how they promote the use of vegetated treatment systems. Ohio cites the *Rainwater and Land Development* guidance, which sets forth recommended BMPs for nonpoint pollution prevention before, during, and after construction. The use of vegetated treatment systems is promoted in this manual as a recommended BMP to act as a control on nonpoint source pollution.

VIII. ADMINISTRATIVE COORDINATION

FINDING: Ohio's program includes mechanisms for coordination among State agencies and between State and local officials.

RATIONALE: Ohio describes how its Nonpoint Source Program has historically been the joint responsibility of the ODNR and the Ohio EPA. Ohio's Division of Real Estate and Land Management (REALM) within ODNR has the lead for implementing the OCMP. Under ODNR's Cooperative Agreement with NOAA, the Division of Soil and Water Conservation is responsible for overseeing development of Ohio's Coastal Nonpoint Pollution Control Plan.

Ohio provides a complete listing of State, regional, and local agencies, including a description of their missions, structures, and respective roles, involved in coordinating the OCMP. Ohio uses a Policies and Programs Coordinating Committee to ensure continuing communication among other agencies networked in the program and to help coordinate the activities of the agencies. Memoranda of Understanding (MOUs) have also been developed between ODNR and the Ohio EPA and ODOT to facilitate coordination among agencies. For purposes of coordinating its Coastal Nonpoint Pollution Control Plan, Ohio plans to use the existing network it has developed for the OCMP. Additionally, the MOU between ODNR and Ohio EPA specifically commits the two agencies to cooperate fully in the planning and development of the coastal nonpoint source pollution control program.

NOAA and EPA believe that Ohio has provided a complete description of its administrative coordination mechanisms. However, as noted below in reference to public education and participation, NOAA and EPA encourage Ohio to expedite its plans to establish a nonpoint source advisory group.

IX. PUBLIC PARTICIPATION

FINDING: Ohio's program provides opportunities for public participation in the development and implementation of the coastal nonpoint program.

RATIONALE: Ohio describes public participation measures that were implemented leading up to the development of both the Ohio coastal nonpoint program and the statewide nonpoint source management plan. Six issue-specific working groups (e.g., agriculture, forestry, etc.) were formed to develop recommendations and action items for incorporation into the State's coastal nonpoint program and the statewide nonpoint source management plan. These working groups appear to have involved a diverse representation of public and private stakeholders. Ohio conducted a series of meetings and public briefings to secure input in relation to the upgrade of the statewide NPS management program. However, it is unclear whether Ohio used these (or other) meetings/briefings to secure public input in relation to the development of the Coastal NPS

Pollution Control Program. Ohio should provide a more detailed description of exactly how it solicited public comments and participation in relation to the Coastal NPS Program.

NOAA and EPA encourage Ohio to expedite its plans to establish a nonpoint source advisory group. It would be useful if Ohio would provide more details as to the specific plans and timeframes in relation to creating the advisory group. Establishing a statewide policy-making body would greatly benefit, and would perhaps be essential, to ensure adequate coordination among programs.

X. TECHNICAL ASSISTANCE

FINDING: Ohio has included programs that will provide technical assistance to local governments and the public for implementing additional management measures.

RATIONALE: Technical assistance for implementation of Ohio's program will be provided under existing partnership programs implemented by Ohio's Coastal Management Program and Nonpoint Source Management Plan and will be strengthened as additional programs and strategies for addressing coastal nonpoint concerns in Ohio are identified and implemented. Ohio references several existing partnerships that are currently operating to support Ohio's Nonpoint Source Program.

Ohio is encouraged to elaborate on the types of technical assistance activities that may be needed to specifically implement the coastal program management measures, and the specific efforts the State plans to initiate in response to those identified needs (e.g., training sessions, demonstration projects, etc.). Ohio is encouraged to identify technical assistance activities for both local governments and the public.

XI. <u>ADDITIONAL MANAGEMENT MEASURES</u>

FINDING: Ohio's program provides for the implementation and continuing revision of additional management measures applicable to critical coastal areas and to cases where the 6217(g) measures are fully implemented but water quality threats or impairments persist.

RATIONALE: In order to determine whether additional measures are necessary to attain or maintain water quality standards in Ohio's coastal waters, Ohio will evaluate both available water quality monitoring data and monitoring data that is generated under proposed expanded

monitoring programs to identify those waters where water quality impairments persist. Ohio will also evaluate the implementation and effectiveness of existing management measures to determine whether additional measures are warranted. Ohio presents a number of recommended strategies that have been identified in order to protect impaired or threatened waters and waters in Ohio's critical coastal areas.

XII. CRITICAL COASTAL AREAS

FINDING: Ohio's program identifies and includes a process for the continuing identification of critical coastal areas adjacent to impaired and threatened coastal waters.

RATIONALE: Ohio identifies urbanization as the greatest threat to maintaining or attaining coastal water quality goals in Ohio. To address this threat, Ohio has identified its entire coastal zone management area, and the land area within a two-mile radius of new (since 1994) urban areas along the Lake Erie shoreline, as critical coastal areas. Ohio identifies critical coastal areas through ODNR's GIS process that overlays coastal nearshore areas with recent urbanization. In doing so, Ohio has also consulted the findings of other areawide planning agencies in the Lake Erie Basin that also identify urbanization as the greatest threat to coastal water quality.

NOAA and EPA recommend that Ohio consider expediting its process to adopt and propose some of its important strategies to protect critical coastal areas (e.g., recommending county land-use planning efforts or encouraging the adoption of model county shoreland zoning ordinances). Some of these approaches may require early action by the State in order to be effective and not possibly lose the opportunity.

XIII. MONITORING

FINDING: Ohio's program does not include a plan to assess over time the success of the management measures in reducing pollution loads and improving water quality.

CONDITION: Within one year, Ohio will include in its program a plan that enables the State to assess over time the extent to which implementation of management measures is reducing pollution loads and improving water quality.

RATIONALE: To evaluate the effectiveness of its program, Ohio will employ existing water quality monitoring efforts and BMP implementation programs, and as resources allow, will

evaluate the feasibility of creating local watershed action plans, demonstration projects, paired watershed studies, and other techniques. The Ohio program acknowledges that addressing deficiencies in BMP tracking is a priority. Since Ohio has identified that urbanization is the greatest threat to water quality, monitoring and tracking the effectiveness of its urban management measure is particularly key in determining whether additional measures are necessary to attain or maintain water quality standards in Ohio's coastal waters. Ohio should clarify exactly how its monitoring program will work in this respect. Ohio should also clarify the roles and responsibilities of the newly assigned Extension Associate in relation to its monitoring program (as noted on p. 11-4).

XIV. ENFORCEABLE POLICIES AND MECHANISMS

Ohio must identify enforceable policies and mechanisms that provide for the "implementation, at a minimum, of management measures in conformity with the ...[§6217(g) measures] to protect coastal waters generally..." (CZARA §6217(b)) Enforceable policies and mechanisms may provide specific authority to implement selected measures, or serve as backup authorities, providing general authority to prevent water pollution.

Throughout its program, Ohio cites many potential backup authorities which alone, do not provide for specific implementation and enforcement of the management measures (e.g., in the agriculture, urban, and hydromodification sections). In October 1998, NOAA and EPA published the *Final Administrative Changes*, which outlines the criteria by which back-up authorities may be used as enforceable policies and mechanisms to provide for the implementation of voluntary or incentive-based programs. These criteria include:

- 1. A legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint source pollution and require management measure implementation, as necessary;
- 2. a description of the voluntary or incentive-based programs, including the methods for tracking and evaluating those programs, the States will use to encourage implementation of the management measures; and
- 3. a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary.

Ohio may wish to consider submitting a legal opinion in conjunction with the detailed information the State has provided on voluntary and incentive-based programs in order to address the enforceable policies and mechanisms component conditions. Please refer to NOAA and EPA's memorandum on Enforceable Policies and Mechanisms for State Coastal Nonpoint Programs (January 23, 2001) for additional information on these requirements and examples on how other States have met them.

Ohio's program also relies heavily upon the use of CWA section 401 certifications to meet program requirements, particularly for hydromodification and wetlands and riparian areas. As discussed in the *Final Administrative Changes*, NOAA and EPA will approve the use of section 401 certifications to meet program requirements where States can demonstrate the following:

- 1. The certifications, either alone or in concert with other programs, are sufficient to address the full range of applicable activities and sources of nonpoint pollution and geographic areas for which they are proposed;
- 2. There is a backup authority (e.g., water quality authority) that can be used, as described above, by the State to enforce conditions or revoke certification; and
- 3. The State has a monitoring system or other tracking methods by which to assess whether permit conditions have been met.